

# Zeus User Meeting

March 21th, 2012

# Agenda

- General Information
- Known Issues
- Protecting restricted data
- Q&A
- Accessing HSMS with HSI

# General Information

- Full system downtime coming In Early April
  - Will get exact date in the next week
- HSMS downtime sometime before end of March
  - Required to change networking after Vapor is decommissioned
- Use qsub (not msub)
  - During the system wide downtime, system will be configured to block all use of msub

# Transitional directory links

- The following transitional directory links have been created:
  - /com
  - /cots
  - /ncep1
  - /ncep2
  - /ptmp
  - /stmp
  - /nwprod
- This links will be available for no more than 120 days to support transition.

Define these paths as variables in your script and reference the paths. DO NOT HARDCODE paths across your scripts. This is not portable.

[https://nescdocs.rdhpcs.noaa.gov/wiki/index.php/Using\\_environment\\_variables\\_for\\_paths](https://nescdocs.rdhpcs.noaa.gov/wiki/index.php/Using_environment_variables_for_paths)

# Outstanding Issues

- Details of issues and current status can be found at:
  - [https://nesccdocs.rdhpcs.noaa.gov/wiki/index.php/Known\\_Issues](https://nesccdocs.rdhpcs.noaa.gov/wiki/index.php/Known_Issues)
  - We'll take a look at this site...

# Protecting Restricted Data

- The method previously used on Vapor and CCS to set group ownership to `rstprod` to protect restricted data works on Zeus today, but is NOT how it will work long term.
- We have a working solution, but senior management asked for a solution that works on Zeus, Gaea, CCS, and future upgrades.
- This will probably be implemented using scripts where the interface will be the same but the actual mechanics will change.
- This has to happen in the next few weeks. If no common solution is found, we will move forward with our working solution (not based on `chmod rstprod`).
- Updates will be provided over the next few weeks.



Any Questions?

# Accessing the HSMS using HSI

- The hierarchical storage management system (HSMS) for long term retention of data is based on IBM HPSS.
- It works the same way as it does from Vapor and the CCS
- This is intended as a getting started for users who have never used HSI (new NCEP users and any users who have no experience with NCEP systems)

This information can be found at:

[https://nescdocs.rdhpcs.noaa.gov/wiki/index.php/Using\\_The\\_HSMS\\_\(HPSS\)](https://nescdocs.rdhpcs.noaa.gov/wiki/index.php/Using_The_HSMS_(HPSS))



# What is HSI

- HSI provides a FTP like interface to HPSS
- It can be used
  - Interactively
  - Via a script of commands
  - String of commands on the command line
- To use HSI, load the HPSS module

```
# module load hpss
```

- Authentication is done using keytab files
  - These should already be created. If you have a problem, email the help system and let us know there is a problem.

# Input to HSI

To create an interactive session:

```
# hsi
```

Single line Execution

```
# hsi "mkdir foo; cd foo; put hpss_file"
```

From a command file:

```
# hsi "in command_file"
```

From a batch script:

```
# hsi << EOF
  mkdir foo
  cd foo
  get local_file : hpss_file
EOF
```

# HSI Example

## Moving files with HSI

- Put a local file to into HPSS directory /BMC/fim/ctierney/local\_file

```
# hsi put /fullpath/local_file | /BMC/fim/ctierney/local_file
```

- Retrieving a file from the HPSS directory /BMC/fim/ctierney/ into the local directory (.):

```
# hsi get /BMC/fim/ctierney/remote_file
```

- Retrieving a file from the HPSS directory /BMC/fim/ctierney to a new name

```
# hsi get /full/path/local_file : /BMC/fim/ctierney/remote_file
```

- Listing the contents of a directory

```
- # hsi ls /BMC/fim/ctierney
```

# HPSS Directory Structure

- For existing Vapor/CCS accounts, the directory structure has not changed (it is based on your old vapor/CCS name):

/NCEPDEV/...

- For new projects, they will be in standard portfolio directory structure

/\$PORTFOLIO/\$PROJECT

- Portfolio is either NCEPDEV or BMC
- Project is for any disk allocated projects (as reported by account\_params)

# Getting more information on HSI

- Run “help” at HSI command line

HPSS File and Directory Commands

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get, cget, mget, recv      - Copy HPSS file to local directory

put, cput, mput, replace, save, store, send

- Copy a local file to HPSS

cp, copy

- Copy a file within HPSS

delete, mdelete, erase, rm

- Remove a file from HPSS

ls, list

- List directory

pwd

- Print current directory

find

- Traverse a directory tree looking

for a file

ln

- Create symbolic link in HPSS

mv, move, rename

- Rename an HPSS file

mkdir, md, add

- Create an HPSS directory

rmdir, rd, remove

- Delete an HPSS directory

cd, cdls

- Change current directory

touch

- Update last access time